

RM760 REPAIR MORTAR (HIGH PERFORMANCE RAPID SETTING) PATCH REPAIR MORTAR FOR QUICK RETURN-TO-SERVICE STRUCTURAL REPAIRS

PRODUCT DESCRIPTION

OPTIMIX RM760 REPAIR MORTAR (HIGH PERFORMANCE RAPID SETTING) is a high performance polymer modified and shrinkagecompensated mortar for repair purposes.

Ultra-rapid strength gain for speedy and emergency repair which down time is critical. Ideally suited for those locations and areas with time constraints for carrying out the repair such as limited working envelope, early re-opening to service, etc.

Formulated with low water demand and very rapid early strength development for reinstatement of concrete.



TYPICAL USAGE

- Quick return to service patch repairs including:
 - Restoration of structural concrete from damage, spalling, honeycombing etc.
 - Reinstate defective concrete and protection of the embedded steel reinforcement.
 - High Build structural or cosmetic repair for vertical and overhead applications.

FEATURES AND BENEFITS

- Easy to Use
- Rapid Early Strength Development
- High Build
 - 35mm per layer for vertical
 - 25mm per layer for overhead



- Cost Effective
- Low Shrinkage
- Good Bonding to Substrate
- Consistent Quality

TECHNICAL DATA

Product Characteristics	OPTIMIX RM760
Compressive Strength at 6 hours	> 20 MPa
Compressive Strength at 7 days	> 30 MPa
Compressive Strength at 28 days	> 40 MPa
Bond to Concrete at 6 hours	> 0.5 MPa
Bond to Concrete at 7 days	> 1.0 MPa
Bond to Concrete at 28 days	> 1.5 MPa
Slant Shear Bond Strength at 28 days	> 2.5 MPa
Shrinkage (Coutinho Ring)	No Crack
Pot Life* (27 °C)	15 minutes
Water Demand (per bag)	2.1 – 2.4 L
Wet Density	1,850 kg/m ³
Yield	1.6 kg/mm/m ²
Packaging (per pail)	15 kg
Shelf Life	6 months

Note: The above are typical laboratory test results and can vary slightly depending on the ambient and substrate conditions during application. *Pot Life strongly depends on the ambient temperature and the relative humidity. As the temperature increases or/and the humidity decreases, the pot life is shortened.

Environmental Data		
Volatile Organic Compounds (VOC)	≤ 10 g/L	
Potential BEAM points	Product is manufactured within 800km of Hong Kong project sites	
Testing Methods		
Compressive Strength	BS 6319 : Part 2	
Slant Shear Bond Strength	BS 6319 : Part 4	
Bond to Concrete	HKHA/MTS (2000), Part D 2.1.15	
Shrinkage (Coutinho Ring)	HKHA/MTS (2000), Part D 2.1.6	



INSTALLATION GUIDE

(Refer to Method Statement for more details)

SURFACE PREPARATION

Break out the repair area and saw cut the perimeter at right angle to the face of the concrete to a depth of at least 10mm to avoid feather edges. Clean the exposed concrete surface and remove dust and loose particles. Expose and remove all loose rust from corroded reinforcement.

Pre-treat any exposed reinforcement by applying **OPTIMIX PE POLYMER EMULSION** cement slurry primer (**PE** : Cement = 1 : 1.5) to the cleaned reinforcement and allow to dry forming the protective film.

Concrete substrate should be soaked with potable water to saturated surface dry conditions, and excess water should be removed.

Prior to installing the repair pre-treat the repair concrete substrate with 1 coat of **OPTIMIX PE POLYMER EMULSION** cement slurry primer (**PE** : Cement = 1 : 1.5) or 1-2 coats of diluted **OPTIMIX SF80 PRIMER** and let the primed substrate become touch dry or tacky.

MIXING

Mix one bag of **OPTIMIX RM760** dry powder with 2.1 - 2.4 L potable water. Mechanical mixing using a slow speed drill fitted with a suitable paddle is recommended. Mix the mixture for about 5 minutes or until a lump-free homogeneous mix is achieved.

APPLICATION

Repair mortar should be placed and compacted onto the primed substrate by trowel or gloved hand. Depending on the substrate conditions and the density of the exposed reinforcement, the mortar may be applied to build up the required thickness under a single application. If sagging occurs or thicker section is required, it should be built up in multiple layers as appropriate.

FINISHING AND CURING

On completion of the surface finishing operation of the repair area, the exposed mortar surface should be cured immediately by the use of **OPTIMIX CURING COMPOUND** or other appropriate means to prevent rapid drying out.

HEALTH AND SAFETY

OPTIMIX RM760 is alkaline in nature and can cause irritations to persons with sensitive skin. Avoid inhalation of dust and contact with skin and eyes. Wear suitable protective gloves and masks while handling the product. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice. This product is non-toxic and is not flammable.

STORAGE

Store the products in a cool and dry place with the original unopened packaging on pallets with plastic wrapping. Protect from direct sunlight, rainfall and exposure to high humidity conditions. Avoid excessive stacking of pallets. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging and reduce shelf life.

ALTERNATIVE PRODUCTS

Other similar products in the Optimix range include:

- **RM740** Repair Mortar (HKHA Class 40) for high strength structural repairs.
- **RM780** Repair Mortar (Rapid Setting) for high strength floor and screed repairs.
- **BP168** Base Plaster (Premium) for high strength rendering and render repairs.

Important Note: The information contained herein is, the best of our knowledge, true and reliable and is supported by the present state of our knowledge. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives as the conditions of use and any labour involved are beyond our control.



OPTIMIX (HONG KONG) LIMITED

20/F, SUP Tower, 75-83 King's Road, North Point, Hong Kong

(852)2395 5388
(852)2802 6408

i [852]2802 6433 ⊕ www.optimix.com.hk





